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TUBERCULOSIS

IN HOGS

A COSTLY LIVESTOCK DISEASE



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TUBERCULOSIS IN HOGS

A COSTLY LIVESTOCK DISEASE

Tuberculosis is one of the leading causes for the condemnation or retention of swine carcasses at slaughter. Because of the more stringent meat inspection regulations of 1972, packers sustain extra costs when the carcass of a hog with tuberculosis is condemned or passed for further processing. These extra costs will ultimately be passed on to the producer.

How is swine tuberculosis detected? What can you as a producer do to protect your herd? Let's examine these questions one at a time. The answers could help you avoid future dollar losses.

HOW SWINE GET TUBERCULOSIS

There are three types of bacteria that can cause tuberculosis in man and domestic livestock. The human type (*Mycobacteria tuberculosis*) is usually associated with the familiar lung disease. This type can also cause tuberculosis in cattle, hogs, dogs, cats, canaries and monkeys.

The bovine type (*M. bovis*) is usually associated with tuberculosis in cattle. Man and hogs may become affected if they come in contact with infected cattle or drink unpasteurized milk from infected cattle.

The avian type (*M. avium*) infects chickens primarily, but it can cause the disease in many other kinds of birds and some mammals. Swine readily become infected with the avian type when exposed to infected poultry or their litter and droppings.

Although hogs are susceptible to infection by all three types, they rarely become infected with the human or bovine types. Human and bovine tuberculosis has been reduced to very low levels in the United States in both man and livestock. These low levels are the result of national control and eradication programs.

The avian type, on the other hand, was the major cause of the 600,000 cases of swine tuberculosis that meat inspectors found during 1974. A study conducted by Veterinary Services Laboratory on tubercular lesions found in swine at slaughter showed that over 95 percent was caused by the avian type of *Mycobacteria*.

HOW IS THE DISEASE DETECTED?

Most hogs with tuberculosis appear healthy. You cannot look at them and tell whether they are infected. This is true even when the disease is far advanced and all organs of the body are affected.

Two methods are available for detecting tuberculosis in hogs. In one, a veterinarian injects a small amount of a testing agent, called tuberculin, into the skin of the hog. The injection site is examined by the veterinarian 48 hours after inoculation. A swelling of the skin at this site indicates that the hog is probably infected.

The second method is to inspect the glands and organs of hogs at the time of slaughter for signs of tuberculosis. This method is an effective and



TOP—Tuberculosis lesion in head gland of hog.

BOTTOM—Tuberculosis lesion in intestinal gland of hog.

economical way to locate affected herds without testing individual hogs on each farm.

Here's how slaughter inspection works. Meat inspectors regularly examine hogs for abnormal tissues at the time of slaughter. When lesions of tuberculosis are found, a report is sent to State or Federal animal health authorities who try to locate the farm from which the hog originated. A State or Federal veterinarian visits the farm and makes a herd study. He advises the owner on steps to take to reduce or eliminate the infection in his herd.

The veterinarian may recommend changes in management practices to help reduce losses. Under certain circumstances he may also recommend herd testing and the removal of reacting animals.

However, because of inadequate identification, it is not always possible to trace infected hogs back to their herd of origin. Many packers and market organizations now identify the swine they buy, usually by a coded slap tattoo. Owners should request this service when they sell their hogs. This identification makes it possible to quickly trace the diseased hogs to the herd of origin so that steps can be taken to reduce further losses. If the infection is not found soon, the disease can spread throughout the herd and a large number of hogs or other livestock may have to be removed or destroyed.

SANITATION AND DISINFECTION

Buildings, feeding floors and other equipment used in the swine operation should be thoroughly cleaned and disinfected following removal of the infected animals. A cresylic, sodium orthophenylphenate, or a permitted general disinfectant should be used. *Lye, quaternary ammonia, chlorine, fluorine or iodine compounds are not effective against tuberculosis organisms and should not be used.*

WHAT CAN YOU DO TO PROTECT YOUR HERD?

- Don't allow poultry of any kind to come in contact with hogs. Keep poultry penned.

- Don't feed dead poultry, poultry entrails, or poultry litter to hogs. Incinerate dead birds or bury them at least 18 inches deep.

- Don't use poultry buildings or equipment for swine unless such facilities have been properly cleaned and disinfected.

- Don't spread poultry litter on fields that are to be used as pasture for hogs or other animals.

- Do routinely disinfect swine houses, feeding floors, and similar areas with effective disinfectants.

- Do protect swine waterers, feed, and feeders from contamination by poultry and wild birds.

- Do keep wild birds away from swine. Tuberculosis has been found in crows, starlings, blue-jays, pheasants, ducks, and other wild birds. . .

Should your hogs become infected with tuberculosis, you can help further by cooperating with State or Federal veterinarians who visit your farm. They are well qualified to advise you about the disease and methods for eradicating it.



(Supersedes PA-775, Avian Tuberculosis in Hogs—A Costly Livestock Disease; approved for reprinting May 1972).